

DISPLAY WITH DATA GROUP COMPARISON

Abstract

One aspect of the present invention provides a system for controlling display cells modulating light based on image data. The system comprises an input controller and a display controller. The input controller is configured to receive a series of image data groups with each image data group having N bits arranged in subgroups, wherein each subgroup has a subgroup value and a subgroup position corresponding to one cell of a group of cells. The input controller is configured to determine a comparison value for each subgroup position based on subgroup values at corresponding subgroup positions of a current image data group and a preceding image data group. The input controller is further configured to provide an update signal based on the comparison values, and to provide an update image data group having less than N bits and representative of the current image data group when the update signal indicates reduced data transmission. The display controller is configured to receive the update signal and the update image data group, and to update the group of cells based on the update signal with N bits of data from at least one of: the update data group, the preceding data group, and a function of the update and preceding data groups.